

What is claimed is:

1. A polishing sheet having an elastic plastic foam sheet containing fine particles, wherein the elastic plastic foam sheet has a fine foam structure to be formed at a polishing face thereof by separating off the fine particles.

2. A polishing sheet according to claim 1, wherein the elastic plastic foam sheet is a continuously foamed body of polyurethane.

3. A polishing sheet according to claim 1, wherein the fine particles are contained in the polishing face of the elastic plastic foam sheet to be separable therefrom.

4. A polishing sheet according to claim 1, wherein the fine foam structure is opened at the polishing face.

5. A polishing sheet according to claim 1, wherein a particle diameter of the fine particles is in a range of from 0.6 μ m to 5 μ m.

6. A polishing sheet according to claim 5, wherein the particle diameter of the fine particles is in a range of from 1 μ m to 3 μ m.

7. A polishing sheet according to claim 1, wherein the fine particles are abrasive particles of at least one kind selected from a group comprising ceric oxide, zirconia, alumina-zirconia, aluminum oxide, alumina ceramics, silicon dioxide, silicon carbide, diamond, ferric oxide, titanium oxide, manganese dioxide, calcium carbonate, and chromium oxide.

8. A polishing sheet having an elastic plastic foam sheet containing fine particles, wherein the elastic plastic foam sheet has first fine foamed cells to be formed by separating off the fine particles and second fine foamed cells that do not contain the fine

particles at a polishing face.

9. A polishing sheet according to claim 8, wherein the first fine foamed cells are opened at the polishing face.

10. A polishing sheet according to claim 8, wherein a space volume occupied by each of the first fine foamed cells is larger than that occupied by each of the second fine foamed cells.

11. A polishing sheet according to claim 8, wherein each of the first fine foamed cells has at least a size for allowing abrasive particles contained in a polishing liquid for secondary polishing to enter thereinto and exit therefrom.

12. A polishing sheet according to claim 8, wherein each of the second fine foamed cells has at least a size for allowing abrasive particles contained in a polishing liquid for secondary polishing to enter thereinto and exit therefrom.

13. A polishing sheet according to claim 8, wherein the elastic plastic foam sheet is a continuously foamed body of polyurethane.

14. A polishing sheet according to claim 13, wherein the continuously foamed body of polyurethane has many foamed cells and communication holes formed between the foamed cells, each of the communications holes having a diameter larger than those of abrasive particles contained in a polishing liquid for secondary polishing.

15. A polishing sheet according to claim 8, wherein the fine particles are contained at the polishing face of the elastic plastic foam sheet to be separable therefrom.

16. A polishing sheet according to claim 8, wherein a particle

diameter of the fine particles is in a range of from $0.6\mu\text{m}$ to $5\mu\text{m}$.

17. A polishing sheet according to claim 8, wherein the particle diameter of the fine particles is in a range of from $1\mu\text{m}$ to $3\mu\text{m}$.

18. A polishing sheet according to claim 8, wherein the fine particles are abrasive particles of at least one kind selected from a group comprising ceric oxide, zirconia, alumina-zirconia, aluminum oxide, alumina ceramics, silicon dioxide, silicon carbide, diamond, ferric oxide, titanium oxide, manganese dioxide, calcium carbonate, and chromium oxide.

19. A polishing work method for a material to be polished, which uses a polishing sheet which has an elastic plastic foam sheet in which fine particles are contained and has a fine foam structure to be formed at a polishing face thereof by separating off the fine particles, comprising the steps of;

attaching the polishing sheet to a surface plate of a polishing machine; and

after all the fine particles are substantially separated off from the polishing face, performing polishing work with the polishing sheet to the material to be polished by using a polishing liquid containing abrasive particles.

20. A polishing work method according to claim 19, wherein all the fine particles are substantially separated off from the polishing face due to dummy polishing by the polishing machine.